SUNRISE POWER PROJECT 98-AFC-4C

Petition for Simple-Cycle Recycle Wastewater Pipeline (June 15, 2001)
Geologic Hazards and Resources Staff Analysis
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<u>SETTING</u>

The Sunrise Power Project is located in the Midway-Sunset Oil Field, in western Kern County. Geology at the site is made up of alluvial sands and silts. The proposed 0.9 mile underground recycle water line route will cross through alluvial fan material shed eastward from the Temblor Range. The same geologic units that underlie the existing Sunrise power plant site and linears, which are Tulare Formation and Quaternary alluvium, also underlie the recycle water line route. The site slope gradient is very shallow, so the potential for slope stability problems is remote. Groundwater at the site is in excess of 300 feet below existing grade.

LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS)

The proposed simple-cycle recycle water line route is subject to the same LORS as the certified Sunrise simple-cycle project. The applicable LORS regarding geologic hazards, geologic resources, and paleontologic resources are contained in Sections 8.14.5, 8.15.4, 18.16.1, and Appendix 1 Section 2.2 of the Sunrise Power Project Application for Certification. The relevant LORS are also summarized in page 13 of Appendix A of the Commission Decision (Docket No. 98-AFC-4).

If the modifications to the Sunrise power plant project are approved, the Project would remain subject to the Conditions for Certification described in Section VII.C of the Commission Decision.

ANALYSIS

Energy Commission staff concludes that the modified project remains susceptible to earthquake hazards and, therefore, recommends that the existing conditions of certification GEO-1 and GEO-2 for the Sunrise Power Project remain applicable. The construction of the recycle water line will not have significant adverse impact on geologic resources, but its linear facilities could interfere with existing oil and gas extraction operations, so the existing condition of certification GEO-3 needs to be modified to assure continued compliance with applicable LORS.

The original conditions for certification include:

- GEO-1 Appointment of a project Engineering Geologist

- GEO-2 Adherence to requirements of Appendix Chapter 33, Section 3309.4 and Section 3318.1 of the 1998 California Building Code.
- GEO-3 Submittal to the California Department of Oil and Gas of a development plan for the linear facilities, to ensure no interference of the project with existing oil and gas wells.

CONCLUSIONS AND RECOMMENDATIONS

The proposed recycle water line is not likely to increase the exposure of people to geologic hazards beyond the level of the original project. However, new linear facilities could interfere with existing oil and gas extraction operations and, therefore, Energy Commission staff proposes a modification to Condition of Certification GEO-3. Subject to the modification to Condition of Certification GEO-3, described below, Energy Commission staff recommends approval of the recycle water line, insofar as geologic hazards and resources issues are concerned.

CHANGES TO EXISTING CONDITIONS OF CERTIFICATION

Energy Commission staff recommends the following changes to the Conditions of Certification. Added text is **bold and underlined** deleted text is shown as **strikethrough**.

GEO-3 Whenever a new linear facility is added to the project (e.g., transmission line, above-ground pipeline, underground pipeline) the The project owner shall submit a revised linear facility (transmission lines and utility lines) development plan, addressing any actions to be undertaken by the project owner to ensure no hazard or problem will be created with the existing wells in the construction site, the and laydown areas, and the alignment of linear facilities, to the Department of Conservation, Division of Oil and Gas, and Geothermal Resources (DOGGR) for review and comment. The linear facility development plan shall include a discussion of how a minimum setback from existing wells is to be maintained.

<u>Verification:</u> At least 30 days prior to start of construction <u>of new linear facilities</u>, the project owner shall submit to the CPM a copy of DOGGR's letter commenting on the <u>current linear facility development plan</u>. Within 15 days of receipt of the detailed map and the DOGGR comment letter on the plan, the CPM will either approve or comment and deny the plan, and transmit the approval or denial letter to the project owner.

NEW CONDITIONS OF CERTIFICATION

No new conditions of certification are recommended.